metos

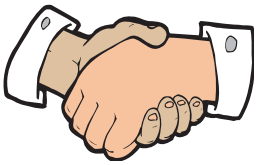
DISHWASHER

LUX 60 EL

Installation and User Manual

COD.: 4400_U Ed. 02 - 03/2012

4246028, 4246029, 4246030, 4246031



Thank you for choosing our machine.

The instructions for installation, maintenance and use found on the following pages have been prepared to ensure a long life and perfect operation of your unit.

Please, do follow the instructions carefully.

We have designed and built this machine using the latest innovative technologies. Now you shall take good care of it.

Your full satisfaction is our greatest reward.

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READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING THE MACHINE.

WARNING: FAILURE TO COMPLY, EVEN PARTIALLY, WITH THE PRESCRIPTIONS IN THIS MANUAL WILL RENDER THE PRODUCT WARRANTY NULL, AND THE MANUFACTURER SHALL NOT BE LIABLE.

WARNINGS

This instruction booklet must be kept with the machine for future consultation. If this machine is sold or transferred to other users, make sure the booklet always goes with the unit so that the new owner can have all the necessary information on operations and all relevant instructions.

The instruction booklet must be carefully read before installation and before starting the machine.

These instructions are supplied to safeguard the users in compliance with Directive 2006/95/CE as amended and the "harmonized product Technical Standard" EN 60335-1 and EN 60335-2-58.

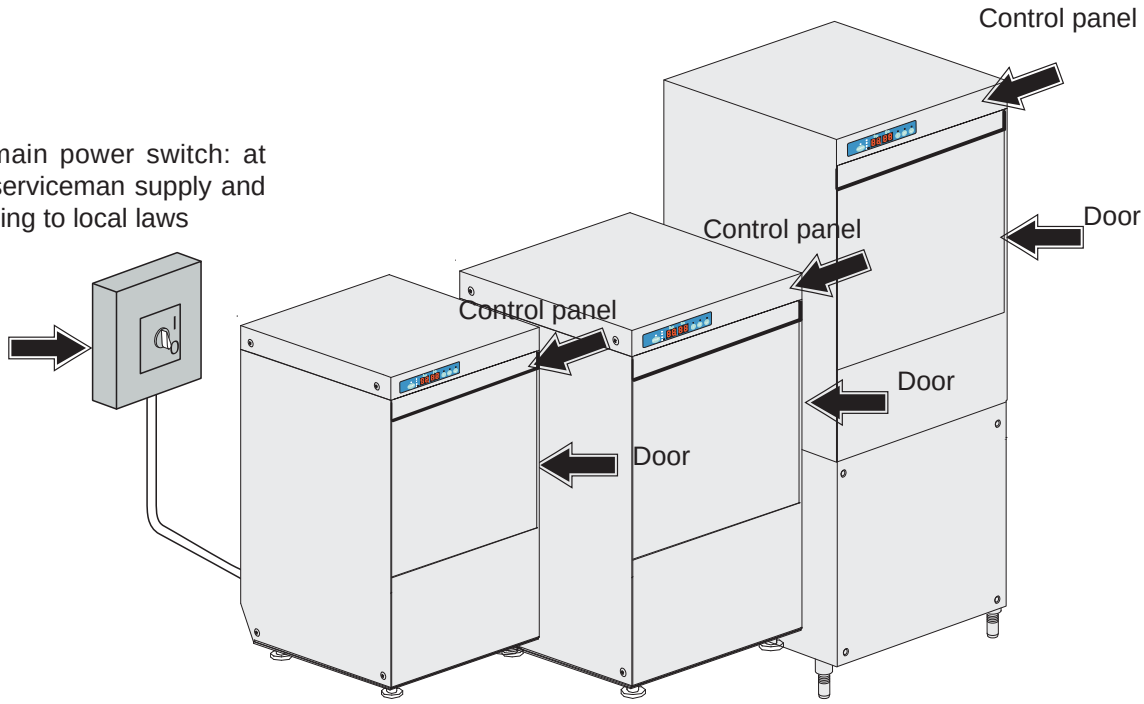
- THE CONNECTION TO THE ELECTRICAL AND WATER NETWORKS, FOR INSTALLING THIS UNIT, MUST BE CARRIED OUT BY QUALIFIED OPERATORS ONLY.
- The user shall not carry out any repair and/or maintenance operations. In any case contact qualified personnel.
- Only qualified personnel can access the control panel, when the main power switch is OFF.
- Servicing of this machine must be performed by authorized personnel only.
  N.B.: Use genuine spare parts only. Non-genuine parts will void the warranty and the manufacturer will take no responsibility for any damage.
- Follow the instructions given in the manufacturer's booklet for cleaning operations (chap.5).
- This machine must only be used by adults. This is a professional machine to be used by qualified personnel, installed and repaired exclusively by qualified Technical Personnel. The Manufacturer declines any responsibility for improper installation, use, maintenance or repair.
- The appliance shall not be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Children must be attended and shall stay away from this machine.

NOTE: The manufacturer declines any responsibility for accidents to people or any damage deriving from failure to observe the above listed instructions.

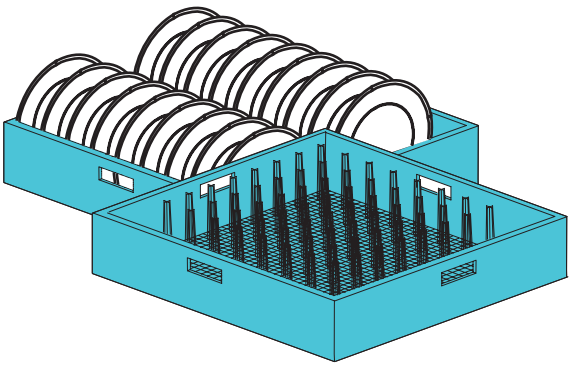
1. MACHINE DESCRIPTION

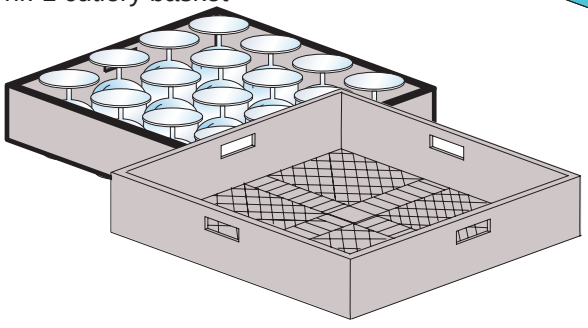
1.1 Machine Description

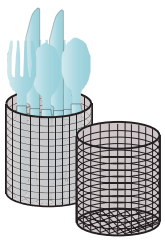
Wall-hung main power switch: at installation serviceman supply and care, according to local laws



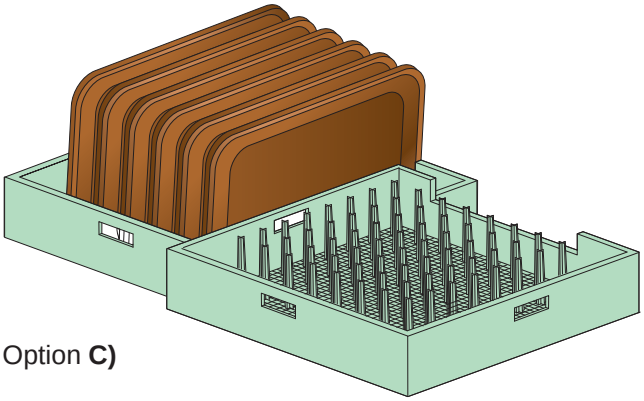
Standard equipment for machine with
a 50mm rack:
nr. 1 glasses rack
and
nr. 1 plates rack 500x500mm
Capacity per plate rack:
12 soup plates or
18 flat plates
Max Ø = 400 mm
and
nr. 1 cutlery basket





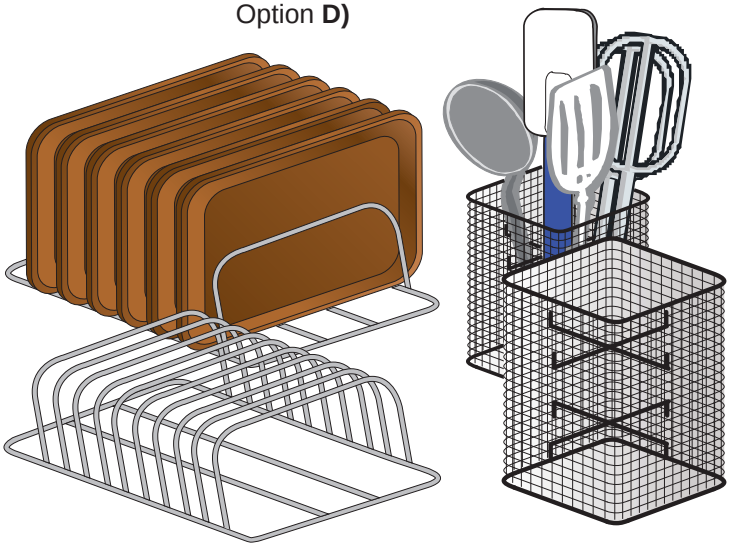


Other standard equipment for machine with a 50mm rack:
C) nr. 1 square trays rack 500x500mm
or
D) nr. 1 trays support 6 pcs
and
nr. 1 inox spatulas rack

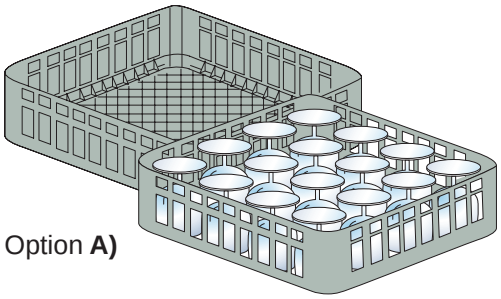


Option **C)**

Option **D)**

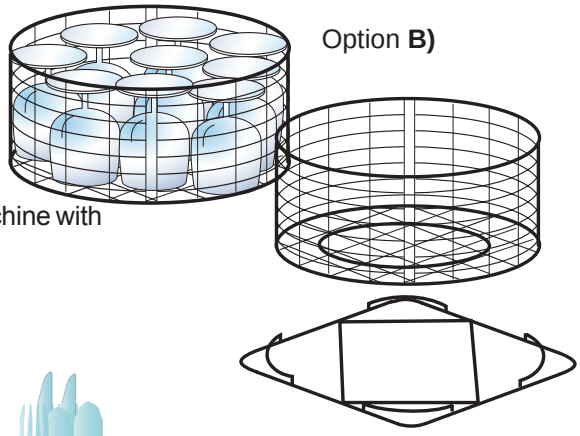


Standard equipment for machine with a 40mm rack:
option A) nr. 2 square glasses racks 400x400mm
or
option B) nr. 2 round racks Ø 400mm
nr. 1 support for round rack

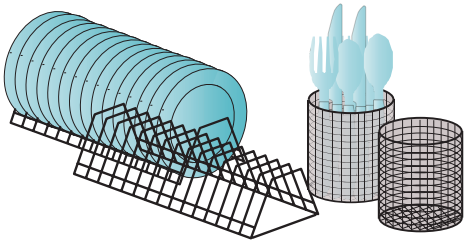


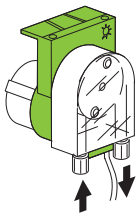
Option **A)**

Option **B)**

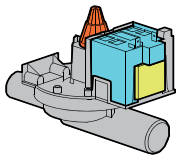


Standard equipment for machine with a 40mm rack:
nr. 1 cutlery basket
and
nr. 1 saucers holder

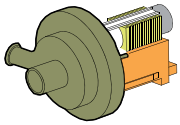


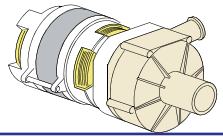


Optional:
Detergent dispenser



Optional:
Drain pump





Optional:
Probe lack
detergent/rinse aid

Optional:
Water softener

To operate the machine, 3 connections are needed:

- Electrical;
- Water supply;
- Water drain.

This is a cycle machine comprising a 55°C wash cycle with detergent, a 82°C rinse cycle with injection of rinse-aid in the boiler hull.

This machine is designed exclusively for washing dishes, glasses and various pots and pans with human food type of residue.

Any other use is deemed improper.

DO NOT wash articles polluted with petrol, paint, chips of steel or iron, fragile objects or material not resistant to the washing process.

Do not use acidic corrosive chemical products or alkaline and solvents or chlorine based detergents.

Do not open the machine door when operating.

In any case, the machine has a special safety device which immediately stops the unit if the door is open, thus preventing water spillage.

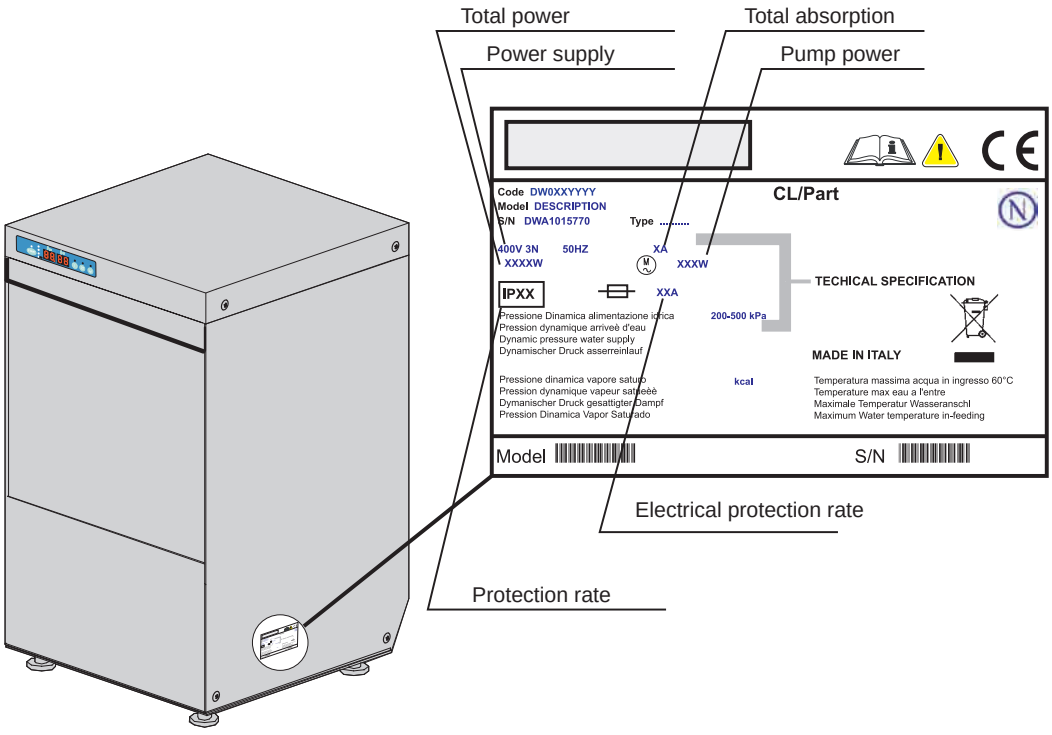
Always switch the machine completely off and drain the water tank, before accessing inside.

The drain pump optional is used to keep the correct water level in the wash tank.

To drain completely the wash tank at the end of the day, see chap. 2.5 "Drain pump system".

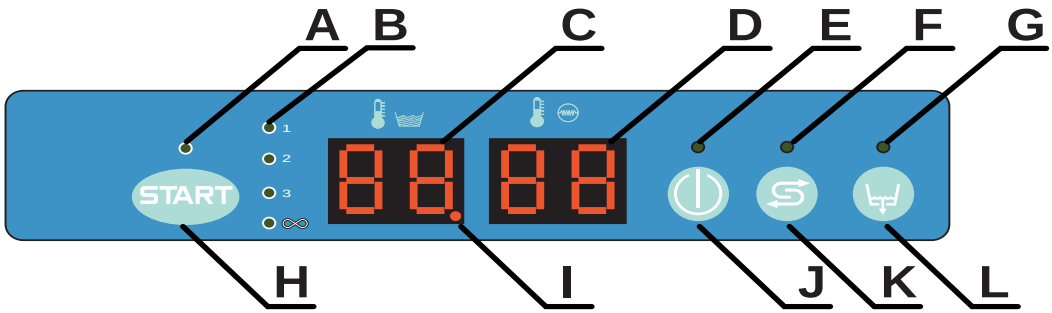
1.2 Machine features

The machine has a noise level below 65 dB(A).



2. OPERATION

2.1 Control panel and relative symbols

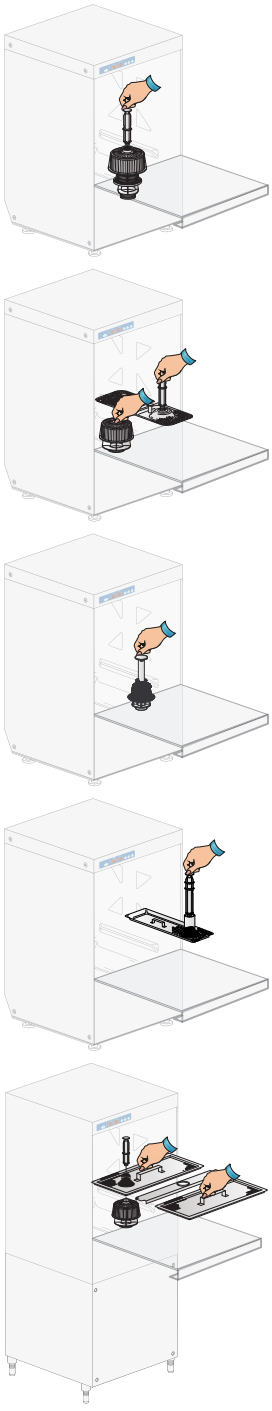


pict. 1

A) Cycle light indicator
B) Selected cycle indicator
C) Tank temperatur display
D) Boiler temperature display
E) ON / OFF indicator
F) Regeneration indicator
G) Drain indicator
H) START push-button to start up cycle / select cycle
I) Cool extra indicator
J) Switching – On / STAND BY button
K) Regeneration push-button (optional)
L) Drain push-button (optional)

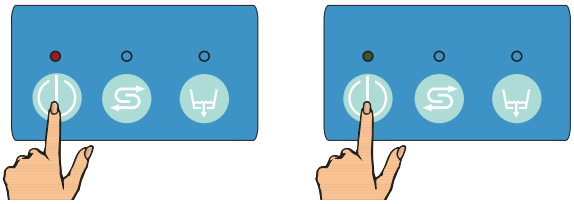
2.2 Machine start-up

2.2.1 Start-up



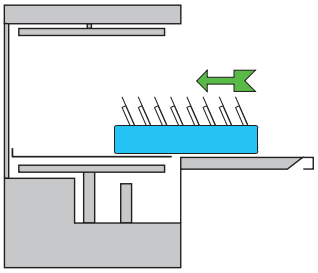
pict. 2

- Insert the overflow pipe in the special seat inside the tank. Make sure all the filters are properly fitted in their seats (see pict. 2). The filters must be cleaned every 30-40 wash cycles and whenever necessary.
  Do not operate the machine without filters and in particular the pump suction filters.
- Close the door.
- Turn the water valve “open”.
  Turn the main power switch ON.
  Turn the button **"J"** (see pict. 1).
  The machine start will be active when the **"E"** indicator will light green. After a few seconds the tank filling phase starts.



- After filling, the machine automatically starts the heating phase.
- The machine will be ready for washing only when the boiler and tank thermometers **"C"** and **"D"** indicate that the required temperatures have been reached, which are 80-85°C for boiler and 50-55°C for the tank.

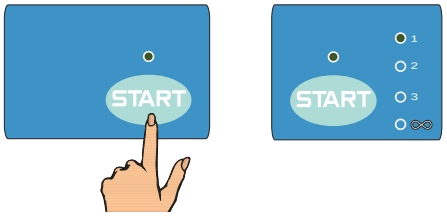
- Insert the special green rinse aid dispenser tube in the liquid rinse aid container and check that the quantity is sufficient for the daily requirement. The transparent tube (if present) must be inserted in the detergent container.



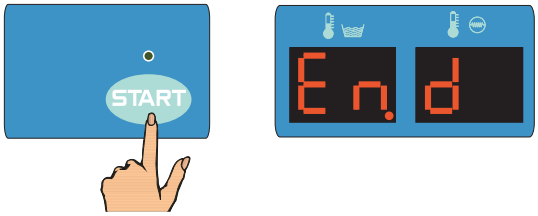
pict. 3

2.2.2 Operation

- Insert the rack filled with dishes to wash. The plates must be correctly placed in the rack (see pict. 3).
  Close the door.
- Select the wanted washing cycle (1, 2, 3, ∞) by pushing the button **"H"** (see pict. 1). The display will show in sequence all available programs.
  Once the wanted program is displayed, do release the button.
  The green LED **"B"** of the selected cycle lights up (1, 2, 3, ∞).



- Start the cycle by pushing the button **"H"** for not more than 1sec (see pict. 1). Starting of the cycle is signalled by the indicator of the selected cycle flashing. At the end of the cycle the indicator stops flashing and the message **"END"** appears on the display.



- The machine is ready for a new wash.

It is advisable to change the tank water, by means of another filling, at least every 40-50 washes or twice a day.
N.B.: the machine does not accept other cycles until the door is opened or the button **"H"** is pressed twice (see pict. 1).
The cycles (1, 2, 3, ∞) are factory-set with times of 60 - 120 - 180 - 300 seconds.

2.2.3 Switching OFF

- Turn the button **"J"**. The machine will turn in **"STAND-BY"** mode (the red LED **"E"** comes ON).

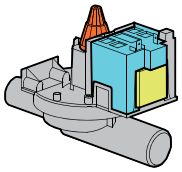
- Drain completely the wash-tank. Take off the overflow pipe. For machines equipped with drain pump see chap. 2.5.
- Switch the main power switch OFF.
- Shut the water valve.
- At the end of the day, clean the machine (see chap. 5 "Maintenance").

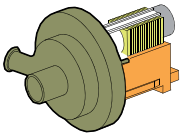
2.3 Detergent use

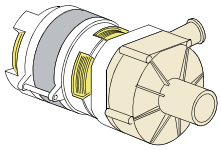
The detergent shall be the NO FOAM type, suitable for industrial dishwashers, and must comply with the EN 60335-2-58/A11 norms.
The use of good quality liquid detergents is recommended.
The detergent must be introduced in the tank. The amount is recommended by the manufacturers according to the water hardness.
By request the dishwasher can be equipped with an electric detergent dispenser (always recommended).
1cm. of the product drawn into the tube is equal to about 0.15 g. A correct amount of detergent is very important for a successful wash.
Should the detergent lack, the display will show **"NO DE"** (only with optional "Sensor for Chemicals Low Level").

2.4 Rinse aid use

The machine has a standard rinse aid dispenser. The machine automatically sucks the product.
The rinse-aid chemical, shall be suitable for professional glass and dishwashers and must comply with the EN 60335-2-58/A11 norms.
The recommended amount is 2-5 cm of product measured on the suction hose. The quantity can be regulated with the micrometric dispenser screw. The amount is decreased with clockwise rotation and increased with counter-clockwise rotation.
1 cm of the product drawn into the hose is equal to about 0.13g. A correct amount of rinse aid is very important for a quick and proper drying.
N.B.: Excessive amount of chemicals or foam will reduce wash pump efficiency.
Should the detergent lack, the display will show **"NO RI"** (only with optional "Sensor for Chemicals Low Level").

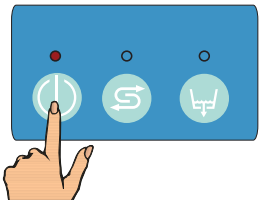




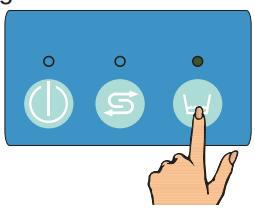


2.5 Drain pump system

The cycle drain pump works in an automatic and independent way.
At the end of the day, to completely empty the tank:
Press the button **"J"**. The machine will turn in **"STAND-BY"** mode (LED rosso acceso).
Remove the overflow.



Close the door. Press the button **"L"**; the green tank drain indicator comes ON for the programmed set time.



After emptying the machine will turn in **"STAND-BY"** mode.
If a alarm appears, see chap. 7.

N.B.: The machine must not be switched ON during the emptying phase.

IMPORTANT: Always turn the main wall switch off and close the water cock at the end of use.

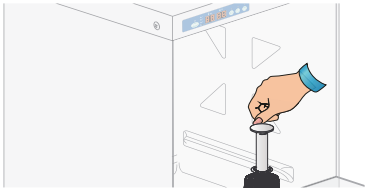
2.6 Regeneration function (optional)

Regeneration is carried out after the flashing signal of the regeneration key indicator **"F"**.

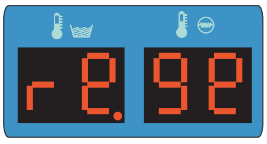
IMPORTANT:

Before starting a regeneration cycle check if there is salt in the special container (max 0,500kg).
Fill the special salt container with tank empty and machine off.
When displaying **"NO SA"** (alternated to the tank and boiler temperatures and with machine on stand-by mode) add salt in the container in the wash-tank (only with optional water softener).

Rinse the tank immediately if salt is spilled in it.
To start the regeneration cycle, switch the machine off with the key **"J"**.
The red LED lights up.
Empty the tank. Remove the overflow.

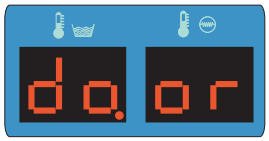


For machines equipped with drain pump see chap. 2.5.
Press the **"K"** button; the display will show **"rege"**.
The regeneration LED lights up and the machine carries out with the various phases.



The cycle is finished when the indicator **"F"** goes off, after around 20 minutes.
Note: Regeneration times will be blocked only if the door is opened.
The optional regeneration is not allowed in the following conditions:

- during programming.
- during the wash cycle.
- during manual draining.
- if the door is open; in this case the message **"DOOR"** will be displayed for about 4sec.

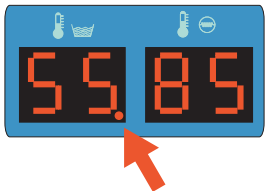


- if the machine is ON.

2.7 Additional Cooling Function (Optional)

This function can only be enabled if the machine is installed with the optional **"Additional Cooling"** function.
Machine ON. Press the button **"K"** for at least 3 sec.
After the hot rinse is completed, an additional fresh-water rinse can be made.
During the wash cycle or manual draining the type of rinse selected cannot be changed.

The Additional Cooling selection is displayed with the decimal point of the second display lighting up.



Note: The Additional Cooling selection is not memorised and must be set every time the machine is switched off and then on again (if this function is required).

WARNINGS:

- Do not slam the door when opening and closing.
- Do not put material or objects on the machine.
- The machine has an IPX3 protection rating against accidental water splashes and is not protected against pressurized water jets. Pressure-cleaning systems shall, therefore, not be used on this machine.
- Do not dip bare hands into water containing detergent. If this should occur, wash them immediately with plenty of water. Check the safety instructions on the detergent container.
- Some important rules must be followed for using this appliance:
  1) never touch the appliance with wet hands or feet;
  2) never use the appliance when barefooted;
  3) do not install the appliance in places exposed to water splashes.
- **This machine must be disconnected from the main electrical supply after use at the end of the day and for any service/maintenance operation. Switch off the main switch located on the wall, which shall be installed by a professional installer. Shut the water supply valve(s).**
- Do not cover the intake or dissipation grids.
- Do not use water to extinguish fires on electrical parts.

WARNING: INTERNAL CLEANING OF THE MACHINE SHALL BE CARRIED OUT AT LEAST 10 MINUTES AFTER THE POWER SWITCH HAS BEEN TURNED OFF.

WARNING: DO NOT INSERT HANDS AND/OR TOUCH THE PARTS LOCATED AT THE BOTTOM OF THE WASH TANK AND/OR AT THE END OF THE WASH CYCLE.

3. ECOLOGICAL ASPECTS

3.1 Recommendations for optimal use of energy, water and additives

Salt dosing

A pre-set (by the manufacturer) quantity of salt is injected in the resins at each regeneration cycle. It is important to observe the number of regeneration cycles recommended in paragraph 2.6 "Regeneration device" in order to avoid salt spills or lime deposits.

Use the machine fully loaded when possible.

This shall prevent detergent, rinse aid, water and energy consumption waste.

Detergent and rinse-aids

Use detergents and rinse-aid chemicals with high biodegradability, to best respect the environment. Verify proper dosage in relation to water hardness at least three times a year. Excess product pollutes rivers and seas while an insufficient dose results in unsatisfactory dish washing and/or hygiene.

Boiler and Wash-Tank temperatures

The boiler and tank temperatures are set by the manufacturer in order to obtain the best washing results with detergents on the market. The temperatures can be reset by the installer in relation to your detergent.

Pre-washing

Carefully pre-wash with a moderate amount of water at room temperature to facilitate the removal of animal fats. To remove encrusted materials warm water soaking is recommended.

Note:

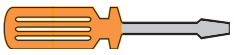
Wash objects as soon as possible to avoid deposits from drying and compromise effective washing.

For effective washing routine dishwasher cleaning and maintenance is advised (see chap. 5).

Disregarding the points listed above and of any the information contained in this manual can cause energy, water and detergent waste with a subsequent increase in running costs and/or performance reduction.

4. H.A.C.C.P. AND HYGIENE REGULATIONS

- When starting the machine ON, no wash-cycle will be starting until the set boiler and wash-tank temperatures are reached. During operation, the machine will not start the rinse cycle till the set boiler temperature is reached.
- Remove carefully all solids from the objects to be washed, to avoid obstruction of filters, nozzles and piping.
- Drain the wash tank and clean the filters at least twice a day.
- Check if the detergent and rinse-aid dosage are correct (as recommended by the manufacturer). In the morning, before starting the machine, check that the quantity of chemicals in the canisters is enough for daily supply.
- Keep your working tables clean.
- Extract the rack with clean hands or gloves to avoid finger marks.
- Do not dry or polish the washed objects with cloths, brushes or rags that are not sterile.



5. MAINTENANCE

5.1 Routine maintenance

WARNING: The machine is not protected against pressurized water jets. Do not use pressure cleaning system against the machine.

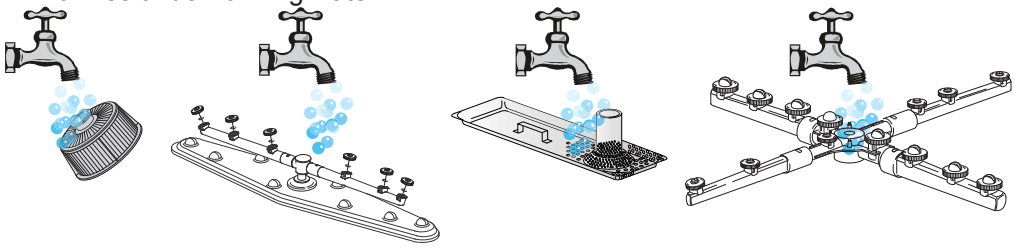
It is recommended to contact the seller of chemicals for proper cleaning instructions, in order to have detailed indications on methods and products for the correct periodical machine sanitation.

Do not use bleach or chlorine based detergents.

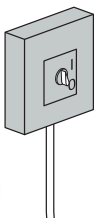
Daily cleaning is needed to ensure that the machine runs perfectly. The following shall be carried out:

- Turn the machine in **"STAND-BY"** mode, by pressing the push-button **"J"** of the control panel (see chap. 2).

- Remove the surface filters and clean them under running water (see pictures 4). Drain the sump water (see chap. 2.2.3).
- Remove the pump filter and clean with a brush and a water shower.
- Remove the arms by loosening the fixing screws, and thoroughly clean them, and the nozzles under running water.

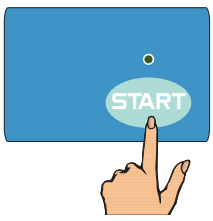


- Reassemble the parts and reposition the wash pipes firmly in place.
- Clean the tank very carefully, using a water shower.
- It is recommended to leave the machine door open at the end of the day.
- Shut the water valve.
- Turned off the machine by switching the main power switch OFF.



Automatic cycle of machine self-cleaning/rinsing: recommended at each day end.

- The machine should be in **"STAND-BY"** mode (without filter, without overflow pipe and machine door closed). Push START button **"H"**; an automatic cycle of 60 seconds will start, after this the machine will be in **"STAND-BY"** mode.



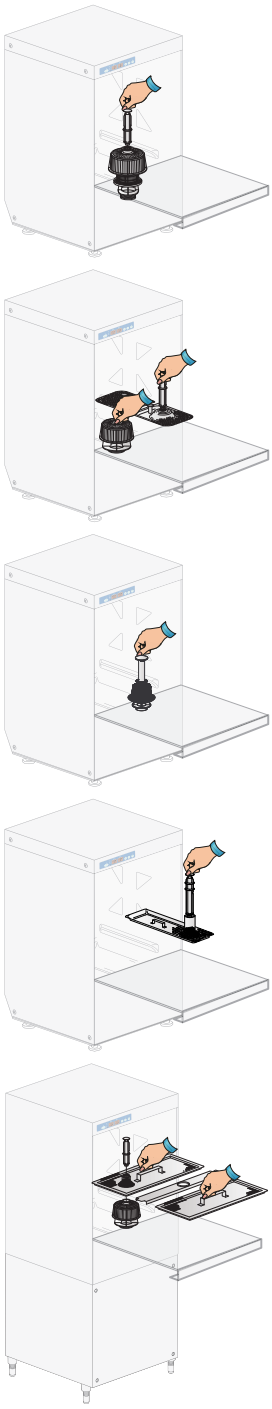
- Shut the water valve.
- Turned off the machine by switching the main power switch OFF.

5.2Extraordinary Maintenance – by qualified Service Personnel

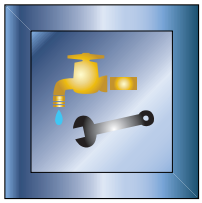
Once or twice a year have the machine inspected by a qualified technician, in order to:

1 Clean the solenoid-valve(s) filters;
2 Remove scale from the heating elements;
3 Control the status of the seals;
4 Control for components integrity and/or consumption;
5 Control the dispenser(s) efficiency.

A qualified electrician, should check all electric connections inside the machine, at least once a year.



pict. 4



6. MACHINE INSTALLATION

6.1 Handling

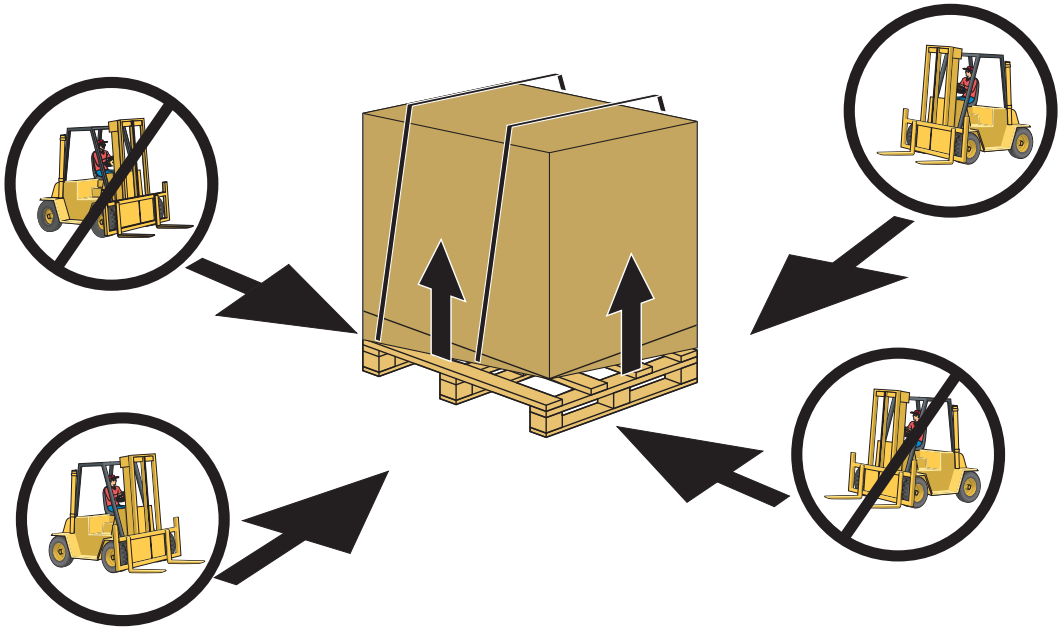
6.1.1 Handling the product

The machines must be handled strictly as shown in pict. 5 regarding the grip points indicated for lifting with a lift truck.
Latch the machine in a way that secures no vibration or shocks during transportation.

N.B.: Slinging with ropes not recommended.

After unpacking, make sure the appliance has not been damaged due to transportation. If it has been, do notify the seller about this problem. If the damage might question the machine's safety, do not install the appliance. See chapter 8 for disposal of the packing material.

pict. 5



6.1.2 Storage

Storage temperature: min. +4°C - max +50°C - humidity <90%.

The stored parts should be checked periodically, to detect any sign of deterioration.

Do not put anything on the machine, even if packed in its box.

6.2 Prepare for installation

This is just a guide-line for the machine installation.

The installation must be performed by a qualified engineer.

6.2.1 Room features

Install the machine, in a room closed to weather and with a guaranteed temperature-range between 5 and 35°C.

The machine is equipped with thermostatic sensors to manage the temperatures. To guarantee a proper functionality these sensor shall not operate at a room temperature below 5°C.

For this reason, it is fundamental that before starting the machine reaches the room temperature.

6.2.2 Electrical connection - Characteristics

The electrical connection to network shall be carried out in accordance to the local laws in force.
Make sure that the supply voltage is the same as reported on the machine plate and that the network can stand the needed power absorption shown on the same plate.
Make sure that the facility is equipped with efficient ground connection.

A suitable omni-polar, one-way switch shall be installed and sized according to the absorption provided, with a contact opening of at least 3 mm. This switch shall be solely and exclusively used for this purpose and installed in the immediate vicinity of the machine, installed in full respect of the local laws. Always turn the machine off via this switch. This is the only model of switch that guarantees a total electrical power disconnection.

6.2.3 Water supply connection - Characteristics

Fresh water supply features:

Water characteristics table	Min	Max
Static Pressure	250Kpa	400Kpa
Dynamic Pressure	200Kpa	350Kpa
Water hardness*	2°f	8°f
Cold water-supply temperature	5°C	35°C
Hot water-supply temperature**	50°C	60°C
Capacity	12lt/min	

Table 1

Connect the machine's water supply with an interrupt valve capable of quickly and completely shutting off water intake.

***It is compulsory to install a water-softener, in case of water with average hardness above 8°f.** Washed objects will be cleaner and the machine will last much longer.
The machine can be equipped with a water softener, on request. If the machine is equipped with a water-softener, a regeneration of the resins shall be done on regular basis (see par. 2.6).
N.B.: Any damage caused by limestone (calcareous water higher-up than 8°F and without water-softener) will not be covered by warranty.
A periodical check of the supplied water hardness is highly recommended.

**The water supply temperature shall never exceed 55°C.

6.2.4 Steam evacuation

In accordance with regulations of environmental hygiene, for the proper functioning of the machine and a healthy environment for the operator who working in there, it should be at least 10 air volume changes per hour in the room where the machine is installed.

For small wash rooms we recommend at least 15 air volume changes per hour

6.3 Installation

6.3.1 Positioning the machine

Remove the packing with care.

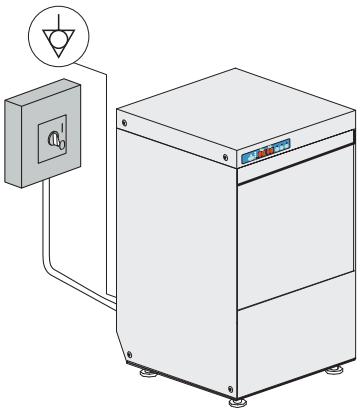
Lift the machine as described in chap. 6.1.1 " Handling the product".

Position the machine as shown on the installation diagram (lay-out) approved at the time of the offer.

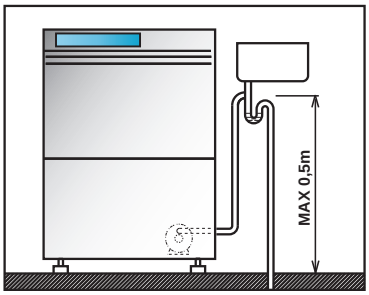
Maintain a minimum distance of about 50 mm from the walls, so that motors are ventilated. Install suction hoods to assure proper ventilation of the room, in order to eliminate steam and excessive humidity.

Check that the machine is properly levelled, by adjusting the legs.

Make sure the machine is not standing on the power cable or on the filling/drain hoses. Level the machine flat, by adjusting the support feet.



pict. 6



pict. 7

6.3.2 Electrical connection

The electrical connection shall be carried out in accordance to the local laws in force.

The machine has a connection at the back, indicated by the symbol , that is meant to link the steel structure and masses among different apparatuses, to prevent electro-static electrical shocks.

The electrical supply cable must be new, flexible, and according to "har" H07RN-F or a local valid equivalent. The cable size is dimensioned according to the power.

Should the electrical supply cable get damaged it shall be changed by the Manufacturer, or his Authorized Service, or other technician with equivalent qualification, to prevent any risk.

If the machine is fitted with a three-phase pump, check the correct motor rotation (right rotation as per arrow on the casing). This is not needed if the pump is a single-phase model (standard).

6.3.3 Water connection

Connect the water in-feed hose, given with the machine, to a ¾" water supply tap.

Connect the machine draining pipe to the connection located at rear, under the back-panel, in such a way that water flows freely (therefore ensuring a minimum slope). If the water cannot be discharged to a level below the machine drain, it is advisable to install a drain pump (supplied on request).

Maximum drain height = cm. 50 (see pict. 7).

The drain tube shall always be connected to a siphon in order to prevent the release of odors.

In those machines equipped with "water softener" the water supply temperature shall not exceed 40°C, to avoid damages to the filters' resins.

6.3.4 Start-up

At installation engineer's care.

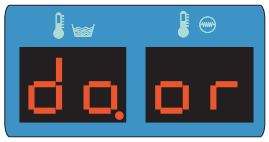
7. SIGNALS AND ALARMS

The alarms and the signals messages are visualized, based upon their meaning .
When on the display the LED **"F"** above the **"K"** key flashes, a total regeneration is needed (only with optional water softener).
When flashing **"NO DE"** (alternated to the tank and boiler temperatures and with machine on stand-by mode), add detergent in the detergent tank (only with optional "Sensor for Chemicals Low Level").

When flashing **"NO RI"** (alternated to the tank and boiler temperatures and with machine on stand-by mode) add rinse-aid chemical in the rinse-aid tank (only with optional "Sensor for Chemicals Low Level").

When displaying **"NO SA"** (alternated to the tank and boiler temperatures and with machine on stand-by mode) add salt in the container in the wash-tank (only with optional water softener).

When displaying **"DOOR"** means that the open door does not allow the maneuver tried, or a wash cycle was in progress, when lifting the door.



TYPE OF ALARM	CAUSE	REMEDIES
B1	BOILER FILLING FAIL	Open the water supply valve and verify a proper water supply flow. Contact Technical Service
B2	BOILER PROBE FAIL.	Contact Technical Service
B3	BOILER HEAT. ALARM	Contact Technical Service
B4	RINSING FAILED TIME OUT RINSE	Contact Technical Service
B5	BOILER OVERHEATING	Contact Technical Service
E1	WATER LOAD FAILED	Open the water supply valve. Contact Technical Service
E2	TANK PROBE FAIL.	Contact Technical Service
E3	TANK HEATING ALARM	Contact Technical Service
E5	TANK OVERHEATING	Contact Technical Service
E6	TANK DRAINING FAIL.	Check the overflow pipe. Contact Technical Service
Z6	TANK LOW LEVEL	Drain and load the tank. Contact Technical Service
Z9	REGENERATION FAIL	Contact Technical Service
Z10	ALARM SL8 - BREAK TANK HIGH LEVEL	Contact Technical Service

Table 3

8. ENVIRONMENTAL ASPECTS

8.1 Packaging

Packaging is made of the following components:

- a wooden pallet;
- a nylon sack (LDPE);
- a multi-layer carton;
- polystyrene (PS) strips;
- polypropylene (PP) banding.

All above materials, shall be disposed and treated in accordance with the Local Laws in force.

8.2 Disposal

The symbol WEEE/RAEE used on this product indicates that it cannot be treated as domestic waste. Proper disposal of this product contributes to protecting the environment. For more information on product recycling, contact the local authorities, domestic waste authorities or the dealer where the product was purchased.
For product or parts disposal, follow the Council directives 2002/95/EC and 2002/96/EC as amended and/or application legislative decrees.
The present product or parts cannot be disposed of as urban waste but shall be collected in separate containers (see the waste bin on wheels symbol with an “X” on the product).
At the time of product disposal, the user shall refer to the waste electrical and electronic equipment (WEEE/RAEE) specification.
The manufacturer guarantees the absence of dangerous substances in the EEA used in conformity to the directive 2002/95/EC.
If the user does not comply with the regulations he/she shall be subject to the penalties foreseen by each member state.
Disconnect electricity and water before disposal.
Cut away the electrical cable to ensure that further use is impossible.
All metal parts are recyclable as they are made of stainless steel.
Recyclable plastic parts are marked with the plastic material symbol.

9. TROUBLESHOOTING

Type of Problem	Possible Causes	Cure
The machine does not turn on	Main switch not ON.	Turn switch ON.
The machine does not load water.	Water valve shut.	Open the hot and/or cold water valve.
	Rinse area nozzles or solenoid-valve filter blocked and/or scaled with limestone.	Clean the rinse arm nozzles, piping and solenoid-valve filter. Check that the water hardness is <10°f.
	Defective pressure-switch.	Replace pressure-switch.
The water drains very slowly from the machine	Scarce water supply pressure	Check the water supply pressure
	Rinse booster pump blocked (if installed)	Call for Service
START button **"A"** flashing (red colour)	See chapter 7 "Alarms".	---
Washing results are unsatisfactory.	The washing nozzles are obstructed or the rack does not rotate.	Clean the nozzles carefully, and check the right positioning of the wash-arm, tightening firmly.
	Foam is present.	Use no-foam detergents or reduce the dose in use. Check the rinse-aid dosage.
	Fats or starches not removed.	Insufficient detergent concentration.
	Filters are dirty.	Remove filters, clean with brush under a jet of water and replace in original position.
	Check tank temperature (which must be between 50°C and 60°C).	Adjust the thermostat or check correct heating element operation.
	Wash time insufficient for the type of dirt.	Select a longer wash-cycle, if possible, otherwise repeat the wash cycle.
	Wash water is dirty.	Drain the tank water, clean the filters; refill the tank and replace the filters correctly.
Glasses or dishes are not properly dried.	Not enough rinse aid.	Increase dosage by turning the dispenser screw (call for Service).
	The rack is not suitable for the pots or the tools.	Use the suitable rack which gives the pots and tools an inclined position so that water can rinse away.
	The washed items may have been sitting in the wash chamber too long.	As soon as the cycle stops, remove the rack with pots and tools so that they can dry more quickly in the air.
	Rinse temperature under 80°C.	Check the boiler thermostat temperature.
	Surface of dishes and glasses too rough or porous for material wear.	Replace type of dishes and glasses used. If the dirt on the dishes is dry and old, soak before washing.
Streaks and spots on glasses and dishes.	Too much rinse-aid chemical.	Reduce the rinse aid amount by turning the micrometric dispenser screw (see par. 1.4 "Rinse aid dispenser").
	Too hard water.	Check the water quality. Water must not exceed 8°f in hardness.
	For appliances with softener: too little salt in the salt container or the resins have not been properly regenerated.	Fill the salt container (coarse salt: 1-2 mm grains) and regenerate the resins more often. If lime deposits are also observed on the body of the machine, have a qualified technician check the operation of the water softener.
	Salt present in dishwasher sump.	Thoroughly clean and rinse the appliance, and avoid spilling salt when filling the container.
The machine suddenly stops during operation.	The machine is connected to an overload device.	Connect the machine on a own overload device (call for Service).
	A machine safety device was triggered.	Check the electrical devices (call for Service).
The machine stops during the wash stage and starts refilling water.	The previous day's water was not changed.	Drain the tank totally and refill.
	Excessive water temperature in tank.	Call for Service to check thermostat and pressure-switch.
	Defective pressure switch.	

N.B.: For any other question, please contact your Service provider.

The manufacturer has right to modify any technical characteristics without prior notice.

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